



**ASTRONOMY—Ms. Hedwall**  
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**Grade Level:** varies

**Subject Area:** Science

**Course Number:** S402301

**Course Title:** Astronomy

**Course Length:** One Semester

**Course Description:**

Astronomy is a scientific course that helps students make sense of how we experience our world in relation to the universe. Science skills and understanding will be strengthened as we use core science topics to explore space. The goals are to expand scientific knowledge and skills while creating a sense of awe in the vastness and complexity of space. Scientific practices will include problem-solving, lab work, critical thinking and group work.

**\*\*Students will need a scientific calculator\*\***

**Topics:**

Sun, Earth, Moon system

Solar system

Stars

Universe

Space Exploration

**Content-based Instructional Practices:**

This course uses inquiry activities, in an experimental setting, with strong emphasis on the content and the process of science. Students will explore astronomy concepts through both group and individual work. Activities may include laboratory experiments (both inquiry and structured), lectures, class discussions, demonstrations, mathematical problem solving, hands-on activities, projects, presentations, and engineering design activities.

**Assessments (on-going, formative and summative):**

Instruction should include formative assessment of prior knowledge, individual development of concepts and effectiveness of instruction. Examples of formative and summative assessments in this course can include informal observations, discussions with students, projects, laboratory reports, student demonstrations, oral presentations, portfolios/notebooks, quizzes and tests.

**Instructional Materials:**

Online resources through schoology

**Technology and Internet:**

Students will use measurement/data-gathering equipment and Internet resources. Where appropriate and available, students and teachers should use electronic sensors and probes, electronic meters, computer simulations, and multi-media presentations.

**Grading Policy:**

Astronomy will follow the Highland Park Senior High School grading policy, with 20% Formative work and 80% Summative work.

Grades will be based on the following items:

Formative: class work, lab work, practice problems, etc

Summative: Quizzes, tests and projects.

## **General Classroom Expectations**

Attend and participate in class every day  
Be on time and prepared (**notebook, pencil, scientific calculator, textbook, iPad**)  
Be respectful of classmates and equipment  
Come to class ready to learn  
Take pride in your work and do your best  
Be open to new ideas and be a good listener  
Be willing to try things that may seem difficult  
Always participate with the highest academic integrity and honesty  
THINK and work hard...no giving up!  
Have fun!

Lab safety procedures are expected to be followed. A copy of the lab safety agreement is found in schoology.

**It is easier to keep up, than it is to catch up** – It is expected that you are present and actively engaging in class work.

For the status of assignment completion and class grades, please see schoology or campus portal. If you have questions regarding the progress of your student, please feel free to contact me.

We're looking forward to a fantastic year!